

# The Citizen Forester

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## Best Management Practices: Tree Planting

By Rick Harper     Recalling once again that the Best Management Practice (BMP) companion publications are developed by the International Society of Arboriculture (ISA) for application by arborists and urban forestry practitioners to aid in the “interpretation of the professional standards and to guide work practices based on current science and technology,” we now examine *Tree Planting, 2<sup>nd</sup> ed.*, by Gary Watson, Ph.D. (2014). This guide was developed as a complement to the ANSI A300 (Part 6) Tree, Shrub, and other Woody Plant Maintenance – Standard Practices (Planting and Transplanting), by the Tree Care Industry Association (TCIA).

The planting guide is divided into eight parts. It begins by introducing the notion that we plant trees for their long-term benefits, and while proper plant selection and other sound practices are important, a poorly prepared site and improperly installed tree may “never reach its full potential as a healthy, vigorous addition to the landscape.”

Part one outlines the ‘Time of Planting’ and identifies that in a temperate zone, the preferred season of planting is typically autumn or spring, but that trees are “routinely” installed throughout the

year, when soils are not

frozen. Two species – magnolia (*Magnolia* spp.) and oak (*Quercus* spp.) - are identified as often being difficult to successfully establish if they are planted in the fall.

Part two discusses the ‘Selection of Nursery Stock’ and commences by outlining the importance of selecting locally-grown trees as they will be most compatible with local climactic

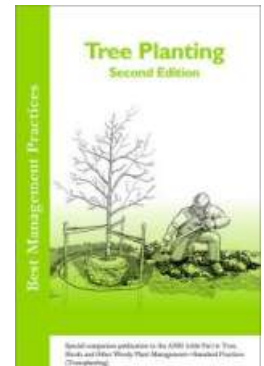
conditions. This section is further sub-divided into nursery production systems, identifying the strengths and weaknesses of utilizing ‘bare-root’ (BR), ‘balled-and-burlapped’ (B&B), ‘in-ground fabric’ (IGF), and ‘container-grown’ trees.

Indicative of its importance in the landscape, part three is entirely dedicated to ‘Proper Root Depth.’

Excess soil on top of the roots in tree installations in the landscape is all-too-often observed in urban settings, regardless of production method. The section commences by highlighting that a swelling should be notable at the base of the trunk (i.e., the ‘flare’), with three or four main flare roots being necessary for tree stability. The guide goes on to encourage removal of excess soil from over the root system and the measuring of the remaining root-ball to determine if root-ball depth measurements meet standards and do not warrant “rejecting the tree.”

According to the guide, excess soil levels are ideally removed before trees are dug in the nursery, as it is often more difficult to address the issue when trees arrive “on the job site,” and there can be increased resistance to replacing the stock after delivery. This section closes by encouraging a thorough examination of trees to determine if there is an excessive soil issue, including noting a “gap” around

the lower portion of the stem by looking for graft unions and by searching for main roots with chaining pins.



If planted too deep, a gap may occur at the base of the tree. Photo courtesy of the Morton Arboretum.

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# Best Management Practices: Tree Planting

Part four, 'Handling & Storage' begins by highlighting the importance of lifting the tree by the root ball or container for all but small trees and of protecting the stem with the use of a proper sling or padding, should it be used to support the tree during transport. While plants are being moved, the branches should be tied, wrapped in tarp, and kept wet – especially if several days are expected before final delivery. Steps for proper storage are also outlined after trees are delivered, including the use of mulch, wraps, and irrigation to keep plant roots moist.

The heart of this guide, the 'Planting' section (part five), is the largest component of this manual. It reiterates that **this stage really commences with a "site condition evaluation" and finishes with "after care."** To determine the drainage rate of a potential planting site, details about a properly performed percolation (also called "perc") test are discussed, and a drainage rate of less than one-quarter inch per hour are identified as being potentially problematic, requiring steps to increase drainage. To determine soil nutrient, organic matter (OM), and pH levels, a soil nutrient analysis is encouraged, with the idea that urban foresters may be able to properly select plant material that will be compatible with site conditions. Amending the site with composted OM is highlighted as being a strategy to improve drainage, to improve the percentage of nutrients, to change pH, and to aid in "long-term performance" of the tree. Fertilizers should only be applied in accordance with known soil deficiencies.

Part five continues with discussion about the **bottom of the trunk flare ("the area of transition between the root system and the trunk") being located at or above the "finished grade."** Instructions are detailed about addressing excess soil on roots by encouraging that a hole be dug shallow-enough to compensate for the removal of excess soil above the large buttress or flare roots (perhaps up to 2" shallower than the root ball depth or 2.5" shallower than the container depth). Professionals are cautioned that if these large roots are planted too deeply, this problem can be difficult to correct. Planting hole width recommendations on sites with "high-quality soil" are defined as needing to be only wide enough to facilitate planting; sites with poorer quality soil may require "wider" holes "at least two times" the width of the root ball diameter. If holes are dug and glazing or drying/crusting of the sides takes place, the use of a hand

tool to break up these surfaces is recommended to facilitate root establishment.

Within part five, the section on 'Preparing the Root Ball for Planting' outlines procedures for final preparation of the trees before they are planted, including trees produced using IGF, trees produced bare-root, and field-grown trees (B&B). The guide asserts that the **entire "grow bag" should be removed from trees produced IGF** and that excess materials like hydrogel should be shaken from bare-root trees. This guide recommends removal of synthetic burlap from B&B trees before they are actually installed; the upper one-quarter to one-third of the wire basket and natural burlap are recommended for removal. This has created some discussion in the industry with professionals questioning why this BMP stops short of recommending that the entire basket and burlap be removed. Once the tree is placed in the ground, it is recommended that soil be replaced six inches at a time and be watered or lightly tamped in. Mulch applied that does not contact the bark of the newly-planted tree, to a depth of two inches and a diameter of six to nine feet for a new tree, is encouraged as it can improve growth and establishment, help to preclude weeds, moderate soil temperatures, and replace organic matter. Though trunk wraps are not expressly recommended, they are discussed as related to protecting bark from winter sun. Interestingly, it is suggested that maintaining similar directional orientation in the new site as was in the nursery may aid in preventing sun-related injury to the stem. This section closes with discussion pertaining to the use of plastic guards to preclude animal injury, as well as discussion about proper planting of palm trees.



Identifying the root flare is key to proper planting and ensuring that roots are not covered with excess soil. Here a chaining pin is used to check depth and identify the flare.



Trunk wrapping as a measure to protect against winter sun injury. Photo courtesy of University of Illinois Extension.

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# Best Management Practices: Tree Planting

**Part six ‘Establishment After Planting’ details the needs that trees have once they are installed, noting that regardless of production method, newly-planted trees may experience “water stress” and that the “most reliable” technique to encourage new root development is to manage moisture and aeration and provide a “high-quality” soil environment for root development. Soil compaction and soil temperatures are listed as being variables important to root growth; stimulants that claim to influence root growth are considered “inconsistent” based on research results.**

**Part seven ‘Maintenance During Establishment’ details the importance of ensuring that the root ball should be kept “moist” the first “year or two” after planting and that water may need to be administered twice-weekly, so that the tree gets about 10 gallons per caliper inch per week in hot weather. Cautionary information is included about how standard irrigation systems for lawns often “over-irrigate” trees, and professionals are encouraged to routinely check the state of moisture in the root ball with a rod or tensiometer. The guide continues to the ‘Fertilization’ section, where it indicates that “adding fertilizer at planting is not usually effective in speeding establishment.” Several select situations are discussed where a slow-release fertilizer application may be warranted or helpful; however the guide re-iterates that products should be applied to correct demonstrated deficiencies.**

Though the guide closes this section with discussion about the possible benefit of anti-transpirants and pesticide applications as part of a pest management program for newly-planted trees, preventing problems associated with transplanting and pests through proper cultural practices seem to be the underlying theme. Selective removal of branches to improve structure of newly-planted trees is outlined, with the thought that returning to prune trees in ensuing years will be necessary.

**Part eight, ‘Inspection’ is the final section and it indicates that each step of the process should be as closely monitored as possible, from the digging of the hole to the inspection of plant material, to after-care of the newly installed tree.**

The planting guide is also available in Spanish. For more information more about the BMP companion guides, visit: [www.isa-arbor.com](http://www.isa-arbor.com).

*Rick Harper is the Extension Assistant Professor in the Department of Environmental Conservation at UMass-Amherst.*

department of Conservation and Recreation

## USDA Forest Service Announces New i-Tree Tool: i-Tree Landscape

i-Tree Landscape is a new online tool that allows you to explore geospatial data for an area of interest. It makes use of datasets, such as land cover and U.S. Census data, to provide local information, tree benefits, and planting prioritization based on user defined criteria. Here is a snapshot of i-Tree Landscapes capabilities.

### Planting Prioritization

Different communities have different priorities and i-Tree Landscape can create tree planting priority maps that consider the current distributions of trees, people and available space. The following priorities can be weighted and combined to best meet community needs:

- ◆ Tree cover per capita
- ◆ Tree stocking, or the amount of available plantable space
- ◆ Population density
- ◆ Population density of minorities
- ◆ Percent of population living below the poverty line

### Ecosystem Service Estimates

Based on tree and impervious cover data, along with other local data, Landscape provides first order ecosystem service estimates and values for:

- ◆ Carbon storage and annual sequestration
- ◆ Air pollution removal with values influenced by the number of people impacted
- ◆ Hydrologic effects including evaporation, transpiration, precipitation interception and avoided runoff.

Go to: [www.itreetools.org](http://www.itreetools.org)

## Growing Greener—in Chicopee

Chicopee, MA was a recipient of a 2015 TD Bank Green Streets grant. This grant program, for Tree City USA communities in the footprint of TD Bank, provides \$20,000 for urban forestry activities in low-to-moderate income neighborhoods. In Chicopee, this grant funded a tree planting training session on October 21 and funded a bare-root tree planting on November 14. Volunteers planted 111 bare-root trees in multiple locations around the city.



# Species Spotlight—Japanese larch, *Larix kaempferi*

By Mollie Freilicher,  
DCR Community  
Action Forester

We explored our native larch (*Larix laricina*) in our [July 2012](#) issue, and this month, we look at another tree



in the *Larix* genus, Japanese larch, *Larix kaempferi*. Japanese larch is a deciduous conifer native to central Honshu, Japan, where it grows on mesic sites up to 7,500 feet in elevation, though it is found on the south slope of Mt. Fuji at an elevation of 9,500 feet. Closer to

home, Japanese larch is hardy in USDA Zones four to seven. Japanese larch grows to heights of 70 to 90 feet, with a 25 to 40-foot spread. The habit is pyramidal and open, with pendulous branches. It is hard to tell Japanese larch apart from European larch (*Larix decidua*). Compared to European larch, Japanese larch twigs are reddish-brown and the leaves are glaucous and wider.



Leaves of Japanese larch are one to one-and-a-half inches long and 1/25 inch-wide and glaucous, blue-green in color, and spirally arranged around the stem. The underside has two white bands. The

leaves turn yellow in autumn and drop off the tree. The buds are small, oblong, and pointed with fringed brown scales. The stem is glaucous and may be with or without brown hairs. Japanese larch is monoecious, with male and female flowers on the same tree.



Female and male strobili (cones) appear in early spring. Female flowers are egg-shaped and can be red, pink, green, or yellow. Male flowers are smaller than female flowers and are yellow. The

fruit is a cone, one to one and a half-inch-long, and occurs on a stalk. The scales of the cone are reflexed (see image). The outer bark is gray-brown and the inner bark is reddish-brown in color. Japanese larch transplants well in dormancy and does best in moist, well-drained, soils on sites with

lots of sun. Pests of larches affect Japanese larch, including larch case-bearer, wooly aphid, and sawfly. It is most suited for large areas, such as parks and golf courses.



## Resources

Dirr, Michael A. 1998. *Manual of Woody Landscape Plants*. 5<sup>th</sup> Ed. Champaign, IL: Stipes.

Photos: Clockwise from top-left: Form, Flower, Leaf, twig, bark, fruit: Virginia Tech

## Growing on Trees

# Tree City USA, Tree Line USA, Tree Campus USA

Applications are due December 31, 2015.

### Tree City USA

The Arbor Day Foundation's [online portal](#) for Tree City USA applications is now available for 2015 applications. We have posted detailed instructions on our website: [2015 Tree City USA Application Instructions and Worksheets](#)



[Sample Work Plans](#)

Additional information: [What is Tree City USA?](#)

### Tree Line USA

Tree Line USA recognizes public and private utilities for practices that “protect and enhance” the urban forest. There are five core standards that companies meet. The goals of Tree Line USA are to promote a safe, reliable electric service and healthy trees in utility service areas. The annual deadline to apply is December 31. More information on the program can be found at: <http://www.arborday.org/programs/treelineusa/summary.cfm>

### Tree Campus USA

The Tree Campus USA program recognizes college campuses for management of trees and for student and community involvement. Tree Campus USA has five core standards that schools must meet to be eligible. The annual deadline to apply is December 31. More information on Tree Campus USA can be found at:

<http://www.arborday.org/programs/treeCampusUSA/index.cfm>

For questions about the application process or to find out how your community, utility, college or university can participate, contact Mollie Freilicher, [mollie.freilicher@state.ma.us](mailto:mollie.freilicher@state.ma.us) 413-577-2966.



# 2016 Arbor Day Poster Contest

## Trees Grow with Us and for Us!

Your school can join us!

All 5th grade students  
in Massachusetts are invited  
to participate in this annual contest  
that combines **art** and **science**.

For complete rules and instructions:

[www.mass.gov/dcr/urban-and-community-forestry](http://www.mass.gov/dcr/urban-and-community-forestry) (Click “Branching Out” on the right.)

Contact: Mollie Freilicher, 413-577-2966

or [mollie.freilicher@state.ma.us](mailto:mollie.freilicher@state.ma.us)

Contest Deadline is: April 1, 2016.

dcr  
Massachusetts



# Growing on Trees

## Grants

DCR Urban and Community Forestry Challenge Grants  
Next deadline: November 1 (Full Application)  
Challenge grants are 50-50 matching grants (75-25 for environmental justice projects) to municipalities and non-profit groups in Massachusetts communities of all sizes for the purpose of building local capacity for excellent urban and community forestry at the local and regional level.

The USDA Forest Service provides funding for the grant program, and DCR administers the grants with guidance from the **Massachusetts Tree Wardens' and Foresters' Association**. The DCR Urban and Community Forestry Program assists communities and nonprofit groups in their efforts to protect and manage community trees and forest ecosystems, with the ultimate aim of improving the environment and enhancing the livability of all of Massachusetts's communities.

For more information on the Challenge Grants, including our Eversource Go Green grants and National Grid Partnership Grants, contact Julie Coop at 617-626-1468 or [julie.coop@state.ma.us](mailto:julie.coop@state.ma.us) or Mollie Freilicher at 413-577-2966 or [mollie.freilicher@state.ma.us](mailto:mollie.freilicher@state.ma.us).

### Changes to the DCR Urban and Community Forestry Challenge Grant

In 2016, our Urban and Community Forestry Challenge Grant will move to one grant round per year. The annual deadline will be November 1. This move will enable the program to better review and compare grant proposals. Look for some additional changes to the 2016 program in upcoming issues.

## Athol Community Wood Bank Volunteer Day

We need your help!  
Join us on December 6, 2015, 10:00 a.m. to 1:00 p.m.  
Athol Department of Public Works  
338 Unity Ave, Athol  
**We'll be splitting and stacking local wood to be used** for the community wood bank. Please wear sturdy shoes or boots and bring water. Light refreshments will be provided. Contact Travis Knechtel, [tknechtel@gmail.com](mailto:tknechtel@gmail.com).

## New England Grows

December 2-4, 2015, Boston, MA

**Come to this year's three-day** tradeshow and educational conference. See the latest equipment and trends for the green industry and attend educational sessions from renowned speakers on a variety of topics. Check out the great lineup of speakers, exhibitors, and other information at: [www.newenglandgrows.org](http://www.newenglandgrows.org).

## From Mass Tree Wardens' and Foresters' Association Tree Warden of the Year

The Massachusetts Tree Wardens' and Foresters' Association is seeking nominations for the Seth H. Swift Tree Warden of the Year Award. The Association's criteria for the award winner include the following:

- ◆ Holds the position of Tree Warden or Deputy Tree Warden in a municipality
- ◆ Actively participates in Tree City USA, the National Arbor Day Foundation's program
- ◆ Demonstrates active leadership and dedication to the protection of urban trees
- ◆ Educates the community about the importance of healthy urban trees
- ◆ Holds an annual Arbor Day celebration
- ◆ Shows commitment to the profession by volunteering with a tree-related organization.

Nomination forms are available on the Mass Tree Wardens' website: <http://masstreewardens.org/tree-warden-of-the-year/>.

Send in your nominations by December 1, 2015.

*Please note: Each year the Mass. Tree Wardens receive a number of nominations, and it is always a very difficult choice! If you've nominated your Tree Warden in the past and been disappointed, we encourage you to resubmit your nomination again this year.*

## 103rd Annual Conference

January 12-13, 2016

Keynote speaker: Lynda V. Mapes, *The Seattle Times*

Check out the schedule and register at

[www.masstreewardens.org](http://www.masstreewardens.org).



# Growing on Trees

## Webcasts

### Urban Forestry Today Fall Noonhour Webcast Series

[Tree Protection during Construction: Part 2  
What You Don't Know Can Hurt You](#)  
December 10, 2015, 12:00 – 1:00 p.m (ET)

Urban tree injury related to construction can degrade the performance of our urban trees, limiting their lifespan and even causing tree failure! Back by popular demand for Part II, Dr. Gary Johnson, University of Minnesota, will inform arborists, urban foresters and tree enthusiasts about the latest research and proper practices related to protecting trees during construction, in this follow-up presentation.

To attend, visit [www.joinwebinar.com](http://www.joinwebinar.com) and enter the ID code **110-714-827**.

These broadcasts are free and each one will offer the opportunity for arborists to earn 1.0 ISA CEU and 0.5 MCA credit. . Part 1 of this tree protection series, along with earlier webcasts can be viewed at [www.urbanforestrytoday.org](http://www.urbanforestrytoday.org).

For more information, contact:  
Rick Harper, Department of Environmental Conservation  
University of Massachusetts, Amherst  
[rharper@eco.umass.edu](mailto:rharper@eco.umass.edu)

*The Urban Forestry Today 2015 Webcast Series is sponsored by the University of Massachusetts Department of Environmental Conservation, in cooperation with the USDA Forest Service, Massachusetts Department of Conservation and Recreation, University of Massachusetts Extension, and Massachusetts Tree Wardens' & Foresters' Association.*

## Urban Forest Connections

**The Forest Service's Urban Forest Connections** webinar series brings experts together to discuss the latest science, practice, and policy on urban forestry and the environment. These webinars are open to all. Go to <http://www.fs.fed.us/research/urban-webinars/>.

December 9, 2015 | 1:00-2:15 pm ET

Urban Tree Use

Steve Bratkovich, Dovetail Partners

Future Webinars

January 13, 2016 | 1:00pm-2:15pm ET

February 10, 2016 | 1:00pm-2:15pm ET

March 9, 2016 | 1:00pm-2:15pm ET

## Northeast Climate Science Center Massachusetts Wildlife Climate Action Tool

December 2, 2015 3:30pm EST

The Massachusetts Wildlife Climate Action Tool is designed to inform and inspire local action to protect the **Commonwealth's natural resources in a changing climate**. This Tool focuses on providing information for a range of local decision-makers, including conservation practitioners, landowners, municipal agencies, and community leaders seeking to conduct on-the-ground climate change adaptation efforts.

Presented by Scott Jackson with UMass Amherst, John O'Leary of the Massachusetts Division of Fisheries and Wildlife, and NE CSC/USGS's Michelle Staudinger. [Click here to join the webinar - you may join 15 minutes early.](#)

Meeting Number: 31239842. This meeting does not require a password or registration. Participation is on a first come, first served basis.

## Harvard Forest Seminars

Attend in person or join online

<http://harvardforest.fas.harvard.edu/seminars>

Seminars are Fridays at 11:00 a.m. Eastern Time, unless otherwise noted. They are held in the Harvard Forest Seminar Room and also can be joined online via web-streaming. Seminars are free and open to the public; no pre-registration is required.

Friday, December 4, - [Join seminar online](#)

*Estimating uncertainty in Holocene vegetation data to improve ecosystem process models*

Jason McLachlan, University of Notre Dame and Harvard Bullard Fellow

Friday, December 11, - [Join seminar online](#)

*I. Where Are the Best Places for the Next Billion People? II. Imagine the Science of Ecology If It Had Started in Cities...*

Richard T. T. Forman, Harvard University Graduate School of Design

# Gleanings

## From the Arbor Day Foundation

*Tree City USA Bulletin*

The Arbor Day Foundation offers a condensed, free version of its popular Tree City USA Bulletin. This bulletin covers many topics, including How to Prune Young Shade Trees, How to Save Trees During Construction, and How to Conduct a Street Inventory, How to Work with Volunteers — Effectively, and many others. Bulletin summaries are available here: <https://www.arborday.org/programs/treecityusa/bulletins/summaries.cfm>. There are also lists of supplemental resources on the bulletin topics. Expanded versions of the bulletins can be purchased on the Arbor Day Foundation [website](#).

### The Female Ginkgo Tree's Acrid Smell of Success

By Dave Taft

October 29, 2015—Simply stated, female ginkgos stink.

**This is not a sexist remark if you're addressing a dioecious tree** — simplified, a tree that grows either male or female flowers on separate plants. The male ginkgo bears no fruit, but those of the female are uniquely malodorous. They have been likened to vegetal vomit (the acrid scent attributable to butyric acid in the soft outer parts of the fruit), and though hard to appreciate, it imparts some adaptive value to the ginkgo fruit — attracting or discouraging interest. Read the full story at the [New York Times](#)

### What Do Trees Tell Us About Climate Change?

By Eva Botkin-Kowacki

November 8, 2015— **Trees don't just provide the paper for history books.** They actually write the historical records themselves. Tree-rings, new layers of wood added to a growing tree each year, record climatic data annually throughout a tree's life. Ancient trees provide a record of drought, rainfall, and other climatic variations. And that record could help scientists better understand current and future climate trends. Dendrochronologist Edward R. Cook and his team at the Lamont-Doherty Earth Observatory of Columbia University have been working to map ancient droughts and downpours in forests across the globe, using the trees themselves as a guide. His latest map, the [Old World Drought Atlas](#), covers Europe, the Middle East, and the Mediterranean rim of Africa, as described in a paper published Friday in the journal *Science Advances*. Previously, Cook and his colleagues created the [North America Drought Atlas](#) and the [Monsoon Asia Drought Atlas](#). Read the full story at [csmonitor.com](#).

### New Book: *The Baltimore School of Urban Ecology*

Space, Scale, and Time for the Study of Cities

J. Morgan Grove, Mary L. Cadenasso, Steward T. A.

Pickett, Gary E. Machlis, and William R. Burch, Jr.; Foreword by Laura A. Ogden

**The first “urban century” in history has arrived: a majority of the world's population now resides in cities and their surrounding suburbs.** Urban expansion marches on, and the planning and design of future cities requires attention to such diverse issues as human migration, public health, economic restructuring, water supply, climate and sea-level change, and much more.

This important book draws on two decades of pioneering social and ecological studies in Baltimore to propose a new way to think about cities and their social, political, and ecological complexity that will apply in many different parts of the world. Readers will gain fresh perspectives on how to study, build, and manage cities in innovative and sustainable ways. Read more at: [yalebooks.com](#).

### Urban Waters Learning Network

The Urban Waters Learning Network is a peer-to-peer network of people and organizations that share practical on-the-ground experiences in order to improve urban waterways and revitalize the neighborhoods around them.

Groundwork USA and River Network staff coordinate the Learning Network providing support and opportunities for members to share successes, challenges, and technical resources.

Find out more here: <http://urbanwaterslearningnetwork.org/>



## News

### Urban Runoff Killing Coho Salmon, But Simple Solution within Reach

Filtration through column of soil and sand eliminates toxic effects of urban stormwater on fish  
October 8, 2015—Toxic runoff from highways, parking lots, and other developed surfaces is killing many of the adult coho salmon in urban streams along the West Coast, according to a new study that for the first time documents the fatal connection between urban stormwater and salmon survival. The good news is that the same study also found that inexpensive filtration of urban runoff through simple columns of sand and soil can completely prevent the toxic effects on fish. Read the full story at [ScienceDaily](#).

### Hunting Down Hidden Dangers and Health Benefits of Urban Fruit

November 1, 2015—Forgotten trees from long lost orchards and 20th-century city landscaping are being rediscovered in urban areas, and their fruits are proving not only largely free of urban pollutants, but more nutritious than their retail counterparts. Read the full story at [ScienceDaily](#).

### Where Have All the Hemlocks Gone?

Shelburne trees cut to curb insects, disease  
By Diane Broncaccio The Recorder  
October 27, 2015—Shelburne Center — It was only a year ago that Norman and Lisa Davenport first noticed sunlight flickering through the once-dense shade of a stand of hemlocks on their hilltop farmland. And now those first trees look more like utility poles than conifers. As the twin evils of elongate hemlock scale and hemlock woolly adelgid spread through 60 to 70 acres of stately hemlock, the Davenports knew they had to take action to stem the losses. Both are invasive, microscopic insects that originated from Asia and have no natural predators here. Elongate Hemlock Scale suck the sap out of the tree needles, eventually killing the tree. Once the scale density reaches about 10 bugs per needle, there may be dieback of limbs. Read the full story at [recorder.com](#).

### Two Westchester (NY) Groups Are Helping Save the American Chestnut Tree

Read about the current effort to plant American chestnut trees that have an added wheat gene to provide resistance to the chestnut blight. The trees are 99.9% American chestnut and produce subsequent generations that resist the blight. Read the story from [lohud.com](#).

### Hopes High for a Fungus-Free State House Holiday Tree

By Craig Sandler

November 7, 2015—**The Tip O'Neill Christmas tree** on the State House West Lawn was beginning to not look a lot like Christmas. So while you might not have been thinking about holiday decorations back in August, Tammy Kraus and Tyrone Lawless were, and they think **they've found the fix. The remedy** — in the form of a new, 22-foot tall white fir — was planted Oct. 24 and can be viewed on the West Lawn.

The old tree, planted and dedicated in 2011 to the memory of the Massachusetts political titan, never did thrive, **and it was clear by late summer that it wasn't going to make it as a festive focus this December.** Kraus got the news in mid-July that it probably would have to come down. She started shopping for a replacement. **The O'Neill tree had supplanted another tree, which had been selected by Kraus and also had to come down.** **"We were hoping when we got the report [from arborist Maltby and Co.] that we could take steps that could save it, but it did not turn out to be the case," Kraus said** of the tree. Far from it. Maltby reported it showed signs **("oozing sap") of the Cytospora Canker, caused by the Cytospora fungus.** Read the full story in [The Boston Globe](#).

### Frederick Civian (stormwater coordinator for Mass-DEP) discusses changes on horizon for stormwater management

By Alexander Silva

October 21, 2015—Westford—New federal stormwater regulations will soon take effect for all cities and towns throughout the state, but the new Municipal Separate Storm Sewer System (MS4) permit requirements come with no financial help, sparking resistance by local **and state officials. "Westford is following the proposed Environmental Protection Agency stormwater permit changes very closely," said Town Manager Jodi Ross. "We are currently working on developing a stormwater management master plan that will help us identify a long-term sustainable approach to protecting the quality of our water resources and meet the permit thresholds."** With no financial assistance for the new permit, town officials need to fit in stormwater management compliance with the various other priorities in Westford. **"We are finding that we need an overhaul of the way we think and talk about the benefits and value of stormwater management," said Town Engineer Paul Starratt.** Read the full story about the upcoming changes at [Westford Wicked Local](#). (Seen in Mark Stinsen's MassDEP Western Region Circuit Rider news)

# On the Horizon

- Dec 1 Nominations Due: Seth H. Swift Tree Warden of the Year Award, [www.masstreewardens.org](http://www.masstreewardens.org)
- Dec 2 ISA Exam, Boston (New England Grows), [www.newenglandisa.org](http://www.newenglandisa.org)
- Dec 2-4 New England Grows, Boston, MA, [www.newenglandgrows.org](http://www.newenglandgrows.org)
- Dec 2-5 American Society of Consulting Arborists Annual Conference, Tucson, AZ, <https://www.asca-consultants.org/>
- Dec 6 Athol Community Wood Bank Volunteer Day, Dept. of Public Works, Athol, 10:00 a.m. to 1:00 p.m. Email Travis Knechtel, [tknechtel@gmail.com](mailto:tknechtel@gmail.com)
- Dec 8 EPA Green Infrastructure Webcast, [www.epa.gov](http://www.epa.gov)
- Dec 9 Urban Forest Connections Webinar, <http://www.fs.fed.us/research/urban-webinars/>
- Dec 10 Urban Forestry Today Webinar. Visit [www.joinwebinar.com](http://www.joinwebinar.com) and enter the ID code 110-714-827
- Dec 31 Deadline: Tree City USA, Tree Line USA, Tree Campus USA**
- Jan 6 EAB Symposium (invitation-only), Tower Hill Botanic Garden, Boylston, MA. To be put on the waiting list, contact [Felicia.bakaj@state.ma.us](mailto:Felicia.bakaj@state.ma.us)
- Jan 12-13 MTWFA Annual Conference, Sturbridge, MA [www.masstreewardens.org](http://www.masstreewardens.org)
- Jan 21 CTPA Annual Meeting, Plantsville, CT, <http://www.ctpa.org/>
- Feb 23 Mass. Arborists Association Annual Meeting, [www.massarbor.org](http://www.massarbor.org)
- Mar 8 UMass Community Tree Conference, Amherst, MA, [www.umassgreeninfo.org](http://www.umassgreeninfo.org)
- Mar 9-10 ELA Conference and Eco Marketplace, Univ. of Mass., Amherst, MA, [www.ecolandscaping.org](http://www.ecolandscaping.org)



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**If you have a topic you'd like to see covered or** want to submit an item to *The Citizen Forester* (article, photo, event listing, etc.), please contact [Mollie Freilicher](mailto:Mollie.Freilicher) or click [here](#).

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